(19) World Intellectual Property Organization

International Bureau



I NORTH BANNAN IN NATUR BANN BANN BANN BANN BANN BANN BANN HAD BANN HAD HAD BANN BANN BANN BANN BANN BANN BANN

(43) International Publication Date 17 March 2005 (17.03.2005)

(10) International Publication Number WO 2005/023179 A3

A61K 31/44, (51) International Patent Classification7: 31/19

(21) International Application Number:

PCT/US2004/026161

(22) International Filing Date: 12 August 2004 (12.08.2004)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

60/498,803

29 August 2003 (29.08.2003) US

(63) Related by continuation (CON) or continuation-in-part (CIP) to earlier application:

60/498,80 (CON)

Filed on

29 August 2003 (29.08.2003)

- (71) Applicants (for all designated States except US): ATON PHARMA, INC. [US/US]; 33 Avenue Louis Pasteur, Boston, MA 02115 (US). SLOAN-KETTERING IN-STITUTE FOR CANCER RESEARCH [US/US]; 1275 York Avenue, New York, NY 10021 (US).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): BACOPOULOS, Nicholas, G. [US/US]; 2109 Broadway, Apt. Number 15-109, New York, NY 10023 (US). CHIAO, Judy, H. [US/US]; 110 Cedar Green Lane, Berkeley Heights, NJ 07922 (US). MARKS, Paul, A. [US/US]; 7 Rossiter Road, Washington, CT 06793 (US). MILLER, Thomas, A. [US/US]; 517 West 113th Street, #82, New York, NY 10025 (US). PARADISE, Carolyn, M. [US/US]; 6 Gilman Lane, Cortland Manor, NY 10567 (US). RI-CHON, Victoria, M. [US/US]; 184 Highland Road, Rye,

NY 10580 (US). RIFKIND, Richard, A. [US/US]; 30 Sutton Place, New York, NY 10022 (US).

- (74) Agent: ELRIFI, Ivor, R.; Mintz, Levin, Cohn, Ferris, Glovsky and Popeo PC, 666 Third Avenue, New York, NY 10017 (US).
- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US (patent), UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

- with international search report
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments
- (88) Date of publication of the international search report: 16 June 2005

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: COMBINATION METHODS OF TREATING CANCER

(57) Abstract: The present invention relates to a method of treating cancer in a subject in need thereof, by administering to a subject in need thereof a first amount of a histone deacetylase (HDAC) inhibitor or a pharmaceutically acceptable salt or hydrate thereof, in a first treatment procedure, and a second amount of an anti-cancer agent in a second treatment procedure. The first and second amounts together comprise a therapeutically effective amount. The effect of the HDAC inhibitor and the anti-cancer agent may be additive or synergistic.

